



RoHS Statement

■ **Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE)**

- All Johanson Products are Compliant

■ **Lead (Pb)**

- Giga-Trim, Air Capacitor, and Tuning Element families are exempt from RoHS
 - ▶ Brass (Copper Alloy) contains less than 4% lead by weight
 - ▶ The high melting temperature solder (> 90% lead) used in JMC Air Capacitors is exempt from RoHS
- Transition to gold terminations from SnPb where applicable.

■ **Cadmium (Cd)**

- Thin-Trim, Cera-Trim, and Seal-T rim families are not compliant
 - ▶ Rotor contains cadmium
- Alternate material has been found and Johanson is in the process of switching over to new material

■ **Timeline**

- See table on next page

■ **Beyond RoHS**

- Johanson will continuously evaluate new materials as they become available to eliminate lead in brass
- Johanson will continuously evaluate design changes in Air Capacitors to eliminate lead in high melting temperature solder



RoHS and Pb-Free Status

Family	Series	RoHS Compliant	Existing Design Available	RoHS Compliant P/N Change	RoHS Sample Available	RoHS Mass Production	Pb Free
Air Capacitors	15XX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
	5XXX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
	80XX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
Giga-Trim®	17XXX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
	27XXX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
	37XXX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
	47XXX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
	57XXX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
	7XXX	Yes	Yes	N/A	N/A	N/A	No (<4% by weight)
	Tuning Elements		Yes	Yes	N/A	N/A	N/A

Note:

1. Air Capacitors and Tuning Elements with Sn-Pb finish are not RoHS Compliant



RoHS and Pb-Free Status

Family	Series	RoHS Compliant	Existing Design Available	RoHS Compliant P/N Change	RoHS Sample Available	RoHS Mass Production	Pb Free
Thin-Trim®	9401	No	Yes	Yes (9701)	Feb 06	Apr 06	Yes
	9402	No	Yes	Yes (9702)	Feb 06	Apr 06	Yes
	9410	No	Yes	Yes (9710)	Apr 06	Jun 06	Yes
Cera-Trim®	2320	No	Yes	Yes (2322)	Feb 06	Apr 06	Yes
Seal-Trim®	9610	No	Yes	Yes (9810)	Apr 06	Jun 06	Yes
	9620	No	Yes	Yes (9820)	Feb 06	Apr 06	Yes
	99XX	No	Yes	(989X)	Sep 06	Oct 06	Yes
Ceramic Single Turn	9300	Yes	Yes	N/A	N/A	N/A	N/A
	9341	Yes	Yes	N/A	N/A	N/A	N/A
	9342	Yes	Yes	N/A	N/A	N/A	N/A
	9343	Yes	Yes	N/A	N/A	N/A	N/A
	9344	Yes	Yes	N/A	N/A	N/A	N/A
	9350	Yes	Yes	N/A	N/A	N/A	N/A
	9385	Yes	Yes	N/A	N/A	N/A	N/A

Note:

1. Ceramic Single Turn parts shipped before July 1, 2005* are not RoHS Compliant, consult factory